



# Notes on the Completion of Fire Reports on Form K433

HOME OFFICE  
AND SCOTTISH HOME DEPARTMENT  
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This booklet is issued by the Home Office and the Scottish Home Department for the use of the Fire Brigades of Fire Authorities and should be read in conjunction with Fire Report Form K433.

The information contained in the completed forms is transferred to punched cards for statistical analysis. It is therefore very important that the forms should be completed as described in the Notes.

# NOTES ON THE COMPLETION OF FIRE REPORTS

(FORM K433)

## PART I

**Division, etc., Station.** These particulars should relate to the station on whose ground the fire took place.

**"County" and "Administrative Area."** This item need not be completed if the administrative area is a county borough of England or Wales. For all other administrative areas, i.e., Metropolitan borough, municipal borough, urban district, or rural district in England and Wales, large burgh, small burgh, or district council in Scotland and county borough, borough, urban district, or rural district in Northern Ireland, give the name of the area and indicate the type by adding Met.B., M.B., U.D., or R.D. for England and Wales, L.B., S.B., or D.C. for Scotland and C.B., B., U.D., or R.D. for Northern Ireland, after the name, e.g., Chelsea Met.B., Winchester M.B., Brandon and Byshottles U.D., Winchester R.D., Kirkcaldy L.B., Penicuik S.B., Western 2 D.C., Ballymena B. It is very important that the full name and correct type of area should be given, especially in the case of those counties which contain two or more administrative areas bearing the same or similar names.

## PART II.—CALL

**Item 1. "Date and day of call".** The day of the month should be followed by the month, the year, and the day of the week on which the call was received, e.g., 2nd October, 1950, Monday.

**Item 2. "Discovered by".** Enter one of the following :—

Caretaker	Police
Night watchman	Passer-by
Occupier	Others (describe)

stating whether the person was inside or outside the building involved at the time of discovery, e.g., (1) night watchman patrolling building, (2) policeman passing on beat, (3) passer-by.

*Item 3. "Method of calling : (a) W.F.B., (b) F.B."*. This is the method by which the initial call was received by (a) the Works Fire Brigade (if any) and/or (b) the Fire Service. Enter one of the following as appropriate :—

Street fire alarm (connected direct to fire station)	Exchange telephone
Fire and police pillar/box (connected direct to police station)	Police telephone
Automatic fire alarm	Private fire telephone
	Running call
	Other means (describe)

If calls are received by more than one method, enter the initial call only.

An entry of "Police", "Stranger", "Passer-by" is insufficient ; it is the method by which notification was given by these persons that should be reported. If the station that attends a fire is notified by telephone from Divisional H.Q., "Direct line from Divisional H.Q." should not be entered as the method of calling the Fire Service : enquiry should be made of Divisional H.Q. as to how the Fire Service received the call.

If, for example, a call relayed to the Fire Service by the Police originated at a fire and police pillar or box, it should be recorded as having been made by "Fire and police pillar/box" and not by "Police telephone". Care should therefore be taken to verify the origin of such calls.

If the initial alarm of a fire was given by a sprinkler gong, this should be stated, e.g., "Street fire alarm—sprinkler gong heard operating by caller".

For "Late Calls", i.e., calls to a fire which the Fire Service know has been extinguished some time previously, the method of calling the Service should not be reported : "Late Call" should be recorded under this item.

*Item 4. "Weather"*. Give the atmospheric conditions, entering one or more of the following, as appropriate :—dry and clear, misty, foggy, drizzling, raining, sleeting, snowing, hailing.

*Item 5. "Road condition"*. Enter one or more of the following, as appropriate :—dry, wet, frost, snow, ice.

*Item 6. "Wind"*. Give strength of wind, viz. :—no wind, light, moderate, strong.

*Item 7. "Time of discovery"*. The time should be ascertained, where possible, by enquiring of the person who discovered or first observed the fire.

*Item 8. "Time under control".* Generally, this time will be obtained from the recorded stop message in the station watchroom. In the case of a fire extinguished before the arrival of the Fire Service, the time when it was brought under control should be obtained from the persons who extinguished the fire.

*Item 9. "Time of call to : (a) W.F.B. (b) F.B.".* This is the time of completion of the initial call to (a) the Works Fire Brigade (if any) and/or (b) the Fire Service. When a station which attends the fire receives the call from some other station or Control, the time to be entered is that at which the first station or Control received the call.

*Item 10. "Time of arrival of (a) W.F.B., (b) F.B.".* Enter in the appropriate space the time of arrival of the first W.F.B. and/or the first F.B. appliance at the fire.

*Note.*—In filling in the times for items 9 and 10 the figures should be entered immediately beneath each other to facilitate coding, e.g.—

Time of call to        (a) W.F.B. 2008        (b) F.B. 2011

Time of arrival of (a) W.F.B. 2009        (b) F.B. 2015

*Item 11. "Address of Fire".* The address given by the caller may not always be the address of the fire. Enter under this item the correct address of the fire.

*Items 12 and 13. "Name of occupier(s)" and "Trade(s) or business(es) carried on".* Where private residential property is involved this should be described under item 13, as "private house" or "flat". With commercial concerns distinction should be made between wholesale and retail businesses.

For all multi-storey buildings the floor on which the fire started should be given under item 13, as well as the trade or business carried on.

When there is more than one occupier in the building or block of buildings involved, the name of the occupier in whose part of the building the fire started should be given first, together with his trade or business. The other occupiers whose premises are involved should be listed, with their corresponding businesses, and the floor on which

businesses involved should be distinguished by the letters (a), (b), (c), etc.

Similarly where, in one building, there is one main business comprising several processes or sub-occupancies (e.g., an aircraft factory will contain paint shop, machine shop, assembly shop, etc.), the trade or business carried on in the room in which the fire started should be given, and also that in those rooms to which the fire spread.

The following examples illustrate the above points.

(1) 12. <i>Name of Occupier(s)</i> Robert Robinson ..	13. <i>Trade(s) or Business(es) carried on</i> Private house Where fire started : Ground floor
(2) 12. <i>Name of Occupier(s)</i> Messrs. B. M. & Co.	13. <i>Trade(s) or Business(es) carried on</i> Offices of electrical engineers Where fire started : 2nd floor
(3) 12. <i>Name of Occupier(s)</i> (a) John Smith ..  (b) Tom Brown ..  (c) Dick Jones ..	13. <i>Trade(s) or Business(es) carried on</i> Where fire (a) Boot and shoe re- started : parer (ground floor)  Where fire { (b) Office (account - spread to : ant) 1st floor above (a) } (c) Wholesale woollen merchant's store (ground floor)
(4) 12. <i>Name of Occupier(s)</i> Messrs. A.B. & Co..	13. <i>Trade(s) or Business(es) carried on</i> Airframe manufacturers Where fire (a) Paint spraying started : shop Where fire { (b) Machine shop spread to : (c) Pattern store
(5) 12. <i>Name of Occupier(s)</i> Tom Brown ..	13. <i>Trade(s) or Business(es) carried on</i> Where fire (a) Flat (1st floor) started : Where fire (b) Butcher's shop spread to : (ground floor)

Considering example (5) : if only the business " Butcher's shop " is given and it is required to relate, in analysis, the causes of fire with business, it would be misleading to relate the cause of this fire with the business " Butcher's shop ", since it started in private residential property. Similarly in example (3), the cause of the fire should be related to " Boot and Shoe repairer ", and this would not be possible unless it were clearly indicated in which of the three businesses involved the fire started.

Where hazards other than buildings are involved, the name of the owner should be given under item 12, and his trade or business,

if relevant, under item 13. The type of hazard, and if possible its position, should also be given under item 13. For example :—

(1) 12. <i>Name of Occupier(s)</i> Blue Black Line ..	13. <i>Trade(s) or Business(es) carried on</i> Shipping Company Cargo ship in dock*
(2) 12. <i>Name of Occupier(s)</i> James Walker ..	13. <i>Trade(s) or Business(es) carried on</i> Farmer Hay stack in field
(3) 12. <i>Name of Occupier(s)</i> William Smith ..	13. <i>Trade(s) or Business(es) carried on</i> Motor cycle on road
(4) 12. <i>Name of Occupier(s)</i> George Black ..	13. <i>Trade(s) or Business(es) carried on</i> Removal Contractor Furniture van on road*

\* It would not be necessary to specify the type of cargo of the ship or the contents of the van under this heading, since these would be set out in detail in Part III, item 3, "Particulars of contents".

### PART III.—PARTICULARS OF FIRE

*Item 1. "Supposed Cause".* Much of the value of the statistical analyses depends on the fullest possible detail being given under this heading and it is important to include all available information. For example, it is insufficient to give "Light thrown down", for this will cover many causes which should not, in analysis, be grouped under one heading. The "light" may be a match, cigarette end, pipe ember, etc., and the material which it ignited when it was thrown down may be one of a vast number of different combustible materials. It is important, therefore, to describe not only the igniting agent, i.e., the match or cigarette end, but also what was ignited by it, i.e., paper, cotton, rubber, etc. ; and, further, how one came to be ignited by the other, i.e., in the example under consideration, by the act of throwing down the match or cigarette end.

Similarly, "Children playing with matches" is inadequate unless it is stated what material came to be ignited by the matches.

"Airing linen" is useless unless it is known what source of ignition caused the linen to be ignited, e.g., a spark from a domestic coal fire, and the act which led to the ignition, e.g., putting the linen too near the fire.

The officer completing the form should, therefore, describe in his own words how he thinks the fire occurred, on the basis of the available evidence, stating if possible :—

- (a) the source of ignition,
- (b) the nature of the material first ignited,
- (c) any acts or omissions which led to the outbreak of fire.

In some instances it may not be possible to ascertain (a), (b) and (c) : in this event, whatever is known of the cause should be given and the remainder should be stated as unknown (see example 6 below). When an appliance which may be heated by different fuels is the source of ignition, the fuel as well as the ordinary name of the appliance, should be stated (see examples 3, 4, 8 and 9 below).

The following examples illustrate the type of description required :—

- (1) Cigarette end thrown away by workman set fire to cotton bales.
- (2) Children playing with matches set fire to curtains.
- (3) Electric iron left switched on set fire to ironing blanket.
- (4) Ember from domestic log fire set rug alight ; no guard to fire-place.
- (5) Steel spade dropped into conveyor belt by accident, became wedged ; resulting sparks caused explosion of magnesium dust, fire followed.
- (6) Petrol vapour ignited by unknown agent.
- (7) Building board ignited by blow lamp placed near by.
- (8) Domestic coal fire ignited timber under hearth, owing to faulty construction of hearth.
- (9) Fat in pan of gas heated fish frying range boiled over and was ignited.
- (10) Fire spread across Smith Street from No. 3 Smith Street.

In cases of doubt or difficulty a senior officer should be consulted.

Where it is thought possible that fire was due to incendiarism, the cause should be entered as " doubtful ". If it is subsequently established in judicial proceedings that the fire was actually due to incendiarism, the entry should be amended accordingly and details of the cause of the fire submitted on form K434.



In incidents in which a death has occurred and an inquest, therefore, becomes necessary, the cause of the fire should be entered as "Unrecorded pending inquest", even if the cause is believed to be definitely established. After the inquest, the entry should be amended accordingly and details of the cause of the fire submitted on form K434. This procedure should also be followed for those cases in which people are seriously injured and may die.

Where neither (a), (b) nor (c) above can be ascertained the cause should be returned as "unknown".

*Item 2. "Particulars of property involved".* For all fires in buildings the description should include information on each of the following points :—

- (a) the type of building construction according to one of the types defined below,
- (b) the number of basements and storeys with approximate dimensions,
- (c) the types of all floors, e.g., all floors timber ; all floors concrete ; ground floor concrete other floors timber ; ground floor part concrete, part timber, other floors all timber,
- (d) type of roof.

### Types of Building Construction

No.	Building construction
1	Timber-framed walls without internal columns
2	Timber-framed walls with unprotected internal columns
3	Timber-framed walls with protected internal columns
4	Load-bearing walls without internal columns
5	Load-bearing walls with unprotected internal columns
6	Load-bearing walls with protected internal columns
7	Framed, unloaded walls, without internal columns
8	Framed, unloaded walls, with unprotected internal columns
9	Framed, unloaded walls, with protected internal columns

*Examples :—*

- (i) Type No. 1. Single storey army hut, boarded walls, timber floor, boarded and felted roof. Approximately 20 ft. by 60 ft.

- (ii) Type No. 5. Five storey mill building, brick walls, all floors timber, asphalt on boarded roof. Approximately 60 ft. by 120 ft.
- (iii) Type No. 9. New office building with 8 storeys and one basement, brick walls, all floors concrete. Approximately 80 ft. by 200 ft.

It is important that these descriptions should not be so brief as to leave any doubt concerning the construction of the building.

If the building or block of buildings involved in the fire comprises more than one of the above types, details of each should be given, and if several businesses listed under Part II, item 13, are carried on in the building, the types of construction should be lettered (a), (b), (c), etc., to correspond with each business.

*Example* :—The building in example 3 of Part II, item 13, would be reported thus—

- (a) and (b) Type No. 4. Two storey, brick walls, all floors timber, boarded and slated roof. Approximately 40 ft. by 80 ft.
- (c) Type No. 5. Single storey, brick walls, concrete floor, asbestos-covered roof. Approximately 20 ft. by 80 ft.

It is easy to identify at a glance some of the nine types of building construction ; a number of typical examples are given below. To assist the officer concerned in deciding upon the classification in cases where the identification is not so obvious, charts setting out the system of classification in more detail, together with an explanatory note, are given in the Memorandum at the end of these notes.

It will be noticed that provision is made for indicating whether the property involved is pre-war or post-war. In addition it would be helpful if the approximate date of building could be inserted. In the case of older properties this could be quite approximate (e.g., 17th century or 18th century) but a closer approximation should be made for later property.

When a post-war private house or flat is involved it should be stated whether it is (a) temporary, (b) permanent prefabricated, or (c) permanent traditional load-bearing masonry construction. The name of the type of house should be stated, e.g., in the case of the temporary houses, Arcon, Mark V Uni-Seco, Tarran, and in the case of the permanent prefabricated houses, B.I.S.F., Airey, Orlit. If the name cannot be ascertained, or if the house is of the traditional

load-bearing masonry construction, a brief description of the nature of the walls and roof as well as the floors should be given, so that the type of construction may be identified.

### **Examples of the various Types of Building Construction**

*Type No. 1. Timber-framed walls without internal columns.* Almost all huts, including any huts (other than the special wartime huts built of concrete), garden sheds, summerhouses, greenhouses, poultry houses, seaside "bungalows," kiosks (other than steel or concrete telephone kiosks) and small sports pavilions are of this type of construction.

*Type No. 2. Timber-framed walls with unprotected internal columns.* Large single storey buildings such as garages, and workshops, which have internal columns and of which the walls consist of weatherboarding, or flat or corrugated sheets on a timber framework, are included in this type of construction.

*Type No. 3. Timber-framed walls with protected internal columns.* This type of construction is comparatively rare ; it is similar to Type No. 2, but internal columns are protected by a casing of concrete, plaster or brickwork.

*Type No. 4. Load-bearing walls without internal columns.* Almost all houses, many old office buildings, public houses, hotels, hospitals, small shops, and churches without pillared aisles are of this type of construction.

*Type No. 5. Load-bearing walls with unprotected internal columns.* This type of construction is encountered in old single storey factory or storage buildings of multiple span, in which the internal columns are of timber or exposed iron or steel ; old mill buildings with brick or stone walls and cast iron columns (usually circular in cross section) ; old warehouses with timber posts supporting the floors ; many large railway stations.

*Type No. 6. Load-bearing walls with protected internal columns.* Old large office buildings in London, and churches and cathedrals with stone pillared aisles are of this type of construction.

*Type No. 7. Framed, unloaded walls, without internal columns.* This type of construction is usually found in single span sheeted buildings, e.g., moderate sized garages and aircraft hangars. In addition, many modern cinemas are in this class.

*Type No. 8. Framed, unloaded walls with unprotected internal columns.* Large wartime single storey steel factory or storage buildings and some provincial department stores are of this type of construction. (In many provincial department stores and shops, and

to some extent elsewhere, columns are encased in decorative timberwork. This does not protect the column against fire and should always be looked upon with suspicion as concealing unprotected metal.)

*Type No. 9. Framed, unloaded walls with protected internal columns.* This is a modern form of construction and is not likely to be encountered with buildings erected before about 1900. It is comparatively rare outside the larger cities, and includes modern multi-storey office buildings and warehouses, high blocks of flats, department stores, and some multi-storey garages.

*Item 3. "Particulars of Contents."* Except in the case of private residential or office property, a description should, where possible, be given of the contents of the building whether they were involved in the fire or not. The main contents involved should be given first and then the remainder, in the approximate order of the amount involved, contents not involved being stated last. It is important in the case of a fire in which more than one business is involved, that the contents given in this item should be linked with the businesses given in Part II, Item 13. Where a multi-storey or multi-compartment building is involved, contents should be described for each floor or compartment.

In a case where private residential or office property is involved, it is unnecessary to give particulars of the contents, since these are of a sufficiently standard nature.

*Item 4. "Extent of Fire."* Where fire is confined to the building or other hazard in which it started, "Yes" should be entered against the appropriate alternative in the space provided. Where fire spreads beyond the building or other hazard of origin, it may be necessary to enter "Yes" in more than one space.

A hall, passage or landing in a building should be regarded as a room. A single storey building consisting of one room should be classified as a building and not as a room.

"Adjoining buildings" are buildings separated by a wall only, e.g., semi-detached dwelling houses. "Separate buildings" are buildings separated by a space, e.g., detached dwelling houses. "Other hazards" include structures other than buildings, vehicles, grassland, ricks, crops, etc.

When fire spreads from one building or other hazard to one or more separate buildings a form K433 should be completed for each building to which fire spreads, and each form should be marked

with a different letter A, B, C, etc. in the space provided at the top right hand corner of the first page. If, for example, a fire spreads to three separate buildings the report forms should be marked A, B and C, respectively, and the entry on the report on the original fire would be "see separate forms K433 marked A, B, C."

*Item 5. "Description of Damage."* For fires in buildings describe briefly the damage caused on each floor to the structure and contents by fire, heat, water and smoke and relate it to the businesses and types of construction listed under Part II, item 13, and Part III, item 2, by letters (a), (b), (c) etc. It is not sufficient to say "Building severely damaged."

The damage to the structure should be reported individually for floors, walls and roof. The damage to the contents should be given in terms of the proportion of contents affected in that part of the building involved in fire as well as the degree of damage sustained, i.e., slight or severe. Information should be given always in the same order—that is, damage to structure, superficial damage to building, damage to contents.

*Examples :—*

- (i) No damage to structure. Slight damage by fire, water and smoke to half contents of kitchen on ground floor.
- (ii) The damage to the property described in example 3 of Part II, item 13, would be reported thus—
  - (a) Timber floor destroyed ; walls stripped of plaster, otherwise undamaged ; contents completely destroyed.
  - (b) Timber floor and roof collapsed ; walls stripped of plaster, otherwise undamaged ; contents completely destroyed.
  - (c) Half of roof covering destroyed and 50 per cent. bales of woollen material slightly damaged by fire, remainder by water.
- (iii) 10 per cent. roof covering destroyed ; structure otherwise undamaged. Severe damage by fire to 25 per cent. contents of machine shop, slight damage by heat and water to remainder.

For fires in hazards other than buildings, the damage should be reported in terms of the area affected in square yards or acres for crops, grassland, woods, etc. and of the weight in tons for farm produce, e.g., ricks, bags of corn. In reporting damage to such

hazards as vehicles, ships, and structures other than buildings, the parts of the hazard affected as well as the degree of damage, i.e., slight or severe, should be described.

*Examples :—*

- (i) 600 sq. yds. grass destroyed.
- (ii) Wheat stack (10 tons), barley stack (15 tons), and half of straw rick (20 tons) destroyed.
- (iii) Upholstery of driver's seat of lorry slightly damaged by fire.
- (iv) Quarter of contents of hold severely damaged by fire, remainder slightly damaged by heat, smoke and water. After bulkhead slightly buckled by heat.

*Item 6. " Sprinklers "*. Give the name of the maker and type of sprinkler after the heading to this item, e.g., Mather and Platt, Mulsifyre System.

*Item 7. " Fire Protection Appliances or Devices, other than Sprinklers, or portable hand operated Appliances "*. Give particulars of any appliances and/or devices, e.g., automatic drenchers, non-automatic drenchers, fireproof doors, rising mains, automatic alarms, automatic CO<sub>2</sub> installations, and state whether :—

- (a) they were brought into use,
- (b) they failed to operate (giving reason),
- (c) they operated satisfactorily, or
- (d) they did not operate satisfactorily (giving reason).

*Item 8. " Method of extinguishing the Fire "*. (i) " *If tackled before the Arrival of the F.B. give details* ". State who tackled the fire and by what means. If powders are used, the nature of their ingredients should be stated. If portable chemical extinguishers are used, the type should be reported, e.g.—

CO<sub>2</sub> (Carbon dioxide)—water extinguisher

CO<sub>2</sub> (Carbon dioxide)—gas extinguisher

C.T.C. (Carbon tetrachloride) extinguisher

Foam type extinguisher

Methyl bromide extinguisher

Soda acid type extinguisher

Private hydrants may be used to tackle fires in some works ; it should be made clear whether the hydrant is outside the building or is a rising main with hose reel attachment inside the building.

When power pumps are used, state the number of pumps and jets and the source of water supply for the pumps. When breathing apparatus is used, state number of sets and type.

*Examples :—*

- (a) Occupier with buckets of water
- (b) Policemen with carbon tetrachloride extinguisher
- (c) Works Brigade with one jet from hydrant
- (d) Works Brigade with 3 jets from 2 pumps from static tanks.  
Three Salvus B.A. sets in use
- (e) Workman with bucket of powdered graphite and asbestos
- (f) Occupier with hose reel from hydrant inside building.

When a fire burns itself out without being tackled or is extinguished by unknown means, this should be stated.

(ii) "*Method used by F.B.*" Give full details of the materials, e.g., water, sand, foam and equipment used. In some instances it will be necessary to describe the way in which the equipment is used, e.g., spades for beating. When breathing apparatus is used, state number of sets and type.

When jets (other than those on hand appliances) are used, the number should be stated.

If a fire is extinguished with water from a hose reel tank alone, it should be stated whether :—

- (a) only the original supply of water in the hose reel tank was used, or
- (b) additional supplies of water had to be provided, e.g., from a hydrant fed into the hose reel tank.

If pumps are used, the number pumping on the fire should be given, together with the source of water supply, for each. Distinction should be made between static tanks and rivers, canals, ponds, etc. Where one source of water supply is used to replenish another, e.g., a hydrant refilling a static tank, this should be made clear.

*Examples :—*

- (a) Buckets of water
- (b) Water from 3 jets from 2 pumps pumping from river, and  
2 jets from one pump pumping from static tank and  
2 jets from one hydrant, 4 Proto B.A. sets used

- (c) Water from one jet from water tender
- (d) Water from one jet from stationary water tender kept filled from hydrants
- (e) Water from hose reel jet, using only original supply in tank
- (f) Water from hose reel jet, using continuous supply from hydrant fed into tank
- (g) Water from hose reel jet and 2 jets from 2 pumps pumping from static tank refilled from hydrant
- (h) 1,000 gallons foam making compound used with two F.B.10 branch-pipes. Water from canal using two pumps. Remainder of burning parts covered with earth
- (i) Removal of burning bedding into garden and subsequent extinction with water from hose reel jet

(iii) "*If immediate Water Supply was inadequate, give Reason and Details of any Relay brought into Operation.*" Only those pumps actually used in the relay should be stated. Pumps pumping directly on the fire should *not* be included. Examples of the type of information required are given below :—

- (a) No mains or static supply immediately available, 10 pumps in relay from river  $1\frac{1}{2}$  miles away.
- (b) Poor mains supply ; no static supply immediately available; 5 pumps in relay from static tank 1 mile away.
- (c) Static supply inadequate. Water carried by 6 mobile dams from hydrant 2 miles away.

## PART IV.—PERSONS RESCUED OR ESCAPING

In every case where it is known that an escape has been made or a rescue effected, enter (if known) sex and age of each person who escaped or was rescued and the method used. The person effecting a rescue should not be named but should be described, e.g., Fire Brigade, R.A.F., police, civilian, in the last column.

The use by the Fire Service of any of the following pieces of apparatus in effecting a rescue should be stated.

Extension ladder	Turntable ladder (hand operated)
First floor ladder	Turntable ladder (mechanically operated)
Hook ladder	Line
Scaling ladder	Automatic escape line (give type)
Escape	



Examples :—

Name	Sex	Age (years)	Method of rescue or escape	Persons effecting rescue
J. Smith ..	M	42	Jumped from first floor window ..	—
M. Jones ..	F	14	Carried down ladder ..	Police
P. Green ..	M	1½	Carried to roof and thence to adjoining building ..	F.B.
O. Black ..	F	33	Automatic escape line (Davey) ..	—
T. Robinson	M	75	Turntable ladder (hand operated) ..	F.B.

When rescue or escape is effected and the method is not known, an entry of either "Rescue by unknown means" or "Escape by unknown means" should be made under the heading "Method of rescue or escape".

## PART V.—CASUALTIES

It is not necessary to enter in this section casualties requiring first aid treatment only. When describing the nature of the injuries, the part of the body affected and the kind of injury should be stated, e.g., face slightly burnt, hand severely burnt, knee dislocated.

When a non-fatal casualty is taken to hospital and detained longer than 24 hours, "Detained in hospital" should appear after the nature of the injury.

It is insufficient to enter "Accidental", "Misadventure", "Suicide" as the cause of death of fatal casualties. The cause given on the medical certificate should be reported.

## MEMORANDUM ON THE DETERMINATION OF TYPES OF BUILDING CONSTRUCTIONS

The charts attached to this Memorandum have been designed to assist officers when examining buildings of doubtful classification, to determine the type of construction as defined in the explanatory Notes, with a view to making the appropriate entry under Part III, item 2, of the report form K433.

The types of construction are defined as follows :—

Type No.	Building Construction
1	Timber-framed walls without internal columns
2	Timber-framed walls with unprotected internal columns
3	Timber-framed walls with protected internal columns
4	Load-bearing walls without internal columns
5	Load-bearing walls with unprotected internal columns
6	Load-bearing walls with protected internal columns
7	Framed, unloaded walls, without internal columns
8	Framed, unloaded walls, with unprotected internal columns
9	Framed, unloaded walls, with protected internal columns

To determine the type of construction it is necessary to examine:—

1. **External Walls.**—To decide whether they are
  - (a) of plaster or sheeting on a timber frame .. Class A
  - (b) load-bearing .. Class B
  - (c) carried or relieved by a steel or concrete frame Class C
2. **Internal Structure.**—To decide whether there are
  - (a) no internal supporting columns .. Class X
  - (b) unprotected internal columns .. Class Y
  - (c) protected internal columns .. Class Z

1. *External Walls.* If on examination of the walls it is found that—

(i) the outsides of the walls are boarded, or of flat sheets of wallboard with timber strips over the joints, or genuinely half-timbered, and also, the overall thickness of the walls is 4 to 7 inches, and also on the inside of the walls a timber framework is exposed or the walls are match-boarded, wallboarded or plastered—the class is “A”.

(ii) If the outside of the walls is corrugated steel, “Robertson’s protected Metal” or corrugated asbestos cement, see Chart 1.

(iii) If the outside of the walls is brick or stone, see Chart 2.

2. *Internal Structure.* Chart 3 indicates whether the building falls in Class X, Y or Z.

Having found the classifications A, B or C and X, Y or Z, the type of building construction is obtained from the following table :—

Classes	Type No.
AX	1
AY	2
AZ	3
BX	4
BY	5
BZ	6
CX	7
CY	8
CZ	9

If any building does not appear to fall into one of the above nine types, a description of the construction of the building should be given.

# CHART 1

## EXTERNAL WALLS

If the  
outside of walls is corrugated steel, "Robertson's  
Protected Metal" or corrugated asbestos cement,  
and also

timber frame is  
visible inside walls,

CLASSIFICATION  
is "A"

light steel framework is  
visible inside walls, to  
which the outer sheet-  
ing is attached,

CLASSIFICATION  
is "C"

walls are 4 to 7 ins.  
overall thickness,  
and also

inside of walls is match-  
boarding, wallboards with  
nailheads or wood cover  
strips showing, plasterboard  
or plaster,

CLASSIFICATION is "A"

inside of walls is wall-  
boarding held by metal  
strips,

CLASSIFICATION is  
PROBABLY "C" BUT  
POSSIBLY "A"

## CHART 2 EXTERNAL WALLS

If the outside of walls  
is brick or stone and also

Walls are  $4\frac{1}{2}$  ins., 9 ins.  
or 11 ins. thick excluding  
plaster, and also

Walls are  $13\frac{1}{2}$  ins. brick-  
work, with or without  
plaster, and also

Walls are 18 ins. or more thick at  
ground floor with reduced thickness  
in higher stories,  
CLASSIFICATION is "B"

With no piers or buttresses  
and also

building is only 1  
or 2 stories high,  
and the width of  
the windows is  
less than the width  
of the wall between  
them,  
CLASSIFICATION  
is "B"

there are windows  
running the full  
width of the wall  
except for mullions  
9 to 18 ins. wide,  
spaced at least  
12 ft. apart  
CLASSIFICATION  
is "C"

With piers or buttresses  
not exceeding 9 ins. pro-  
jection  $\times$  24 ins. wide, at  
least 12 ft. apart, and  
building is 4 stories high  
without frequent substan-  
tial cross walls inside  
building or is 5 or more  
stories high  
CLASSIFICATION is "C"

Walls are not plastered  
both sides, and also

No posts visible  
in walls  
CLASSIFICATION  
is "B"

steel stanchions  
or concrete posts  
are visible in walls  
CLASSIFICATION  
is "C"

no piers or posts  
visible in walls  
CLASSIFICATION  
is "B"

Walls are plastered both  
sides and also

piers projecting 1 in.  
to 3 and 4 ins. to 7 ins.  
wide  
CLASSIFICATION  
is "C"

piers projecting  $4\frac{1}{2}$  ins.  
or 9 ins., and 10 ins.,  
14 ins. or 19 ins. wide  
and also

building is 1 to 3 stories  
high with frequent  
internal walls, or 1 to  
2 stories high  
CLASSIFICATION  
IS PROBABLY  
"B"

building is 4 or more  
stories high with or  
without frequent cross  
walls, or 3 stories  
high without frequent  
walls  
CLASSIFICATION  
is "C"

### CHART 3

#### INTERNAL STRUCTURE

Examine interior of building (this may require care  
if there are many interior walls and partitions)  
and if

there are no columns,  
CLASSIFICATION is "X"

there are columns (these may appear  
as piers on internal walls)  
and

the metal or solid wood  
of the columns is visible,

CLASSIFICATION is "Y"

the face of the columns is  
concrete, brick, plaster,  
terracotta,

CLASSIFICATION is "Z"

the columns are covered  
with decorative panelling or  
other finish,

CLASSIFICATION is  
"Y" or "Z"

(It may be possible to see  
behind some damaged  
panelling or other false  
work to discover whether  
the classification is "Y"  
or "Z".)

